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**DOCKET NO. D-1995-010 CP-2**

**DELAWARE RIVER BASIN COMMISSION**

**Veolia Energy Philadelphia, Inc.  
Tri-Gen Cogenerating Facility & Subsidiary Water Allocation  
City of Philadelphia, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Veolia Energy Philadelphia, Inc. (Veolia or docket holder) on October 20, 2011 (Application), for review of the existing Tri-Gen Cogenerating Facility (Tri-Gen) and the subsidiary water allocation provided by Exelon Generation Company, LLC (Exelon) to the Tri-Gen.

The Application was reviewed for inclusion of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Philadelphia City Planning Commission has been notified of pending action on this docket. A public hearing on this project was held by the DRBC on July 11, 2012.

**A. DESCRIPTION**

**1. Purpose.** The purpose of this docket is to incorporate the Tri-Gen into the Comprehensive Plan and to renew the approval of a subsidiary water allocation provided by Exelon for use at the Tri-Gen for cooling purposes. The docket holder requested approval to withdrawal 217 million gallons per month (mgm). The two (2) pumps operated by the docket holder at Intake No. 1 however have a capacity of 4.32 million gallons per day (mgd) or 133.92 mgm. Therefore, this docket only allocates the amount of water that Tri-Gen may withdrawal to its pump capacity accordingly.

**2. Location.** Intake No. 1 is owned by Exelon and is located in Water Quality Zone 4 of the Delaware River in the tidal portion of the Schuylkill River. The Tri-Gen is located in the City of Philadelphia, Pennsylvania on the former Philadelphia Energy Company (PECO) – Schuylkill site (Schuylkill Site) adjacent to both Veolia's Grays Ferry Cogenerating Facility (GFCF) and Exelon's Schuylkill Generating Station (SGS). Specific location information for Intake No. 1 has been withheld for security reasons.

3. **Area Served.** Energy produced by the Tri-Gen supplies the Pennsylvania-Jersey-Maryland (PJM) grid. For the purpose of defining Area Served, the Application is incorporated herein by reference consistent with conditions contained in the DECISION section of this docket.

4. **Physical features.**

a. **Design criteria.** The Tri-Gen consists of a 55 mega-watt (MW) capacity steam/electric generating unit. The docket holder will continue to accept water from Exelon via a shared intake on the Schuylkill River for once through cooling water. The 10-year expected maximum monthly cooling water demand from Exelon's Intake No. 1 is 217 mgm for the Tri-Gen. However, the two (2) pumps operated by the docket holder to supply water to the Tri-Gen have a capacity of 133.92 mgm. Therefore, this docket only approves an allocation of 133.92 mgm. The 10-year expected maximum monthly water demand needed for the Tri-Gen is included by Exelon in their projections for Docket No. D-1964-074 CP-2, which was approved by the Commission on May 11, 2011. Approximately 1% of the water supplied and used by the docket holder is estimated to be consumptively used.

b. **Facilities.** The Tri-Gen is a 55 MW electric power generation facility that produces electricity and steam.

Exelon's intake has the following characteristics:

INTAKE NO.	TOTAL PUMP CAPACITY (MGD)	DATE INTAKE CONSTRUCTED
1	231.84	6/1/1903

The intake is screened with both traveling and rotary screens.

The three facilities (SGS, GFCF, and Tri-Gen) operate a total of nine (9) pumps that all have the ability to withdraw water from the Schuylkill River via Intake No. 1 with the following capacities [in gallons per minute (gpm)]:

FACILITY	NUMBER OF PUMPS	CAPACITY OF EACH PUMP (GPM)
SGS	2	46,000
SGS	2	7,500
GFCF	3	17,000
Tri-Gen	1	1,200
Tri-Gen	1	1,800

All water service connections are metered.

The water system presently supplies all existing users via existing infrastructure on-site.

c. **Other.** Non-contact cooling water (NCCW) from the power generating equipment at the GFCF and Tri-Gen associated with the withdrawal from Intake No. 1 is internally monitored at Outfall No. 301 prior to comingling with NCCW from the SGS site. The three comingled streams ultimately discharge to the Schuylkill River via Outfall No. 001. The discharge from Outfall No. 001 was approved by the Commission via Docket No. D-2010-040 CP-1 on May 11, 2011. The Pennsylvania Department of Environmental Protection (PADEP) issued its most recent National Pollutant Discharge Elimination System (NPDES) Permit No. PA0011657 on April 1, 2008 for this discharge.

The GFCF, Tri-Gen, and SGS also receive process and/or potable water from the Philadelphia Water Department (PWD). That water stream is segregated from the water stream associated with Intake No. 1 and is conveyed to the City of Philadelphia's collection system, which ultimately is discharged to the Schuylkill River via the PWD Southwest wastewater treatment plant (WWTP), approved via Docket No. D-70-53 CP on December 12, 1972.

d. **Cost.** There are no project costs associated with this renewal.

e. **Relationship to the Comprehensive Plan.** The Tri-Gen was part of the original Schuylkill Site. The Tri-Gen shall be included in the Comprehensive Plan as part of this docket.

## B. **FINDINGS**

The Commission approved Dockets Nos. D-64-74, D-95-10, and D-95-32 on November 25, 1964, June 28, 1995, and June 28, 1995, respectively. Docket No. D-64-74 approved the withdrawal of up to 180 mgd of surface water from the Schuylkill River for use at the SGS. Docket No. D-95-10 approved the subsidiary allocation of up to 7 mgd of surface water from the Schuylkill River for use at the Tri-Gen facility from Exelon's Intake No. 1. Docket No. D-95-32 approved the subsidiary allocation of up to 80 mgd of surface water from the Schuylkill River for use at the GFCF from Exelon's Intake No. 1. The combined water allocation for these three facilities was 267 million gallons per day (mgd) or 8,277 mgm.

On May 11, 2011 the Commission approved Docket No. D-1964-074 CP-2. Docket No. D-1964-074 CP-2 was issued to Exelon and reduced the allocation from Intake No. 1 to 5,180 mgm or 167.1 mgd. Prior to docket approval the Commission learned that the GFCF and Tri-Gen facilities were purchased by Veolia and requested the docket holder submit a renewal application for Dockets No. D-95-10 and D-95-32. Both renewal applications were received on October 20, 2011.

The purpose of this docket is to incorporate the Tri-Gen into the Comprehensive Plan and continue approval of a subsidiary water allocation provided by Exelon for use at the Tri-Gen for cooling purposes in the amount of 133.92 mgm.

Exelon and Veolia currently pay the Commission for surface water fees associated with the SGS, GFCF, and Tri-Gen facilities. Docket No. D-1964-074 CP-2 made Exelon responsible for arranging SWWD fees to continue to be paid to the Commission for water not supplied to any Exelon facility (i.e. GFCF and Tri-Gen), as well as the SGS. DECISION Condition II.d. of that docket holds Exelon responsible for arranging all surface water payments to the Commission. However, Commission staff encourage Veolia to continue to pay separately as they have done in the past.

Section 2.3.5.1 C. of the Commission's *Rules of Practice and Procedure (RPP)*, requires industrial and commercial water withdrawals in excess of one million gallons per day to develop a drought management and contingency plan (DMCP) including emergency conservation measures to be instituted in the event of a Commission declared drought or other water shortage. Resolution No. 83-14 amended the Commission's *Water Code* (Section 2.1.4) to include the conservation goal of a 15 percent reduction in depletive use during drought conditions. DMCPs must contain the following: source of water supply; the average daily and monthly peak water withdrawal; average daily and peak monthly consumptive use (difference between quantity withdrawn and quantity returned to the ground or surface waters of the basin); description of recycling and conservation measures; point of discharge (where water is returned or discharged); types of products produced; normal employment levels (numbers); and estimated employment (numbers) and economic impact for curtailment of water usage for the following levels of curtailment: 10%; 25%; 35%; 50% and 100%.

In a letter dated February 28, 1997, PECO entered into an arrangement with Merrill Creek to supply water to the Delaware River to make up consumptively used water at the SGS. PECO purchased storage in Merrill Creek Reservoir (Docket No. D-1977-110 CP Amendment No. 16) which was to be utilized to release water on behalf of PECO. PECO transferred ownership of the SGS to Exelon on January 1, 2001. The docket was transferred into Exelon's name at the request of both Exelon and PECO via a letter dated January 25, 2001. Exelon maintains storage in Merrill Creek Reservoir for the SGS, GFCF, and Tri-Gen and the DMCP approved for PECO was also transferred into Exelon's name and reflects this condition. DECISION Condition II.1. of Docket No. D-1964-074 CP-2 requires Exelon to implement its approved DMCP when directed by the Commission.

The DRBC estimates that the current maximum monthly withdrawals from Intake No. 1, used for the purpose of cooling water at the Tri-Gen, result in a consumptive use of less than one percent (1%) (<43,200 gpd). The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The Schuylkill River is tidal at the point of discharge from the Schuylkill Site. Using the United States Geological Survey (USGS) Streamstats program, Commission staff estimate that the low flow of the Schuylkill River ( $Q_{7-10}$ ) is 388 cubic feet per second (cfs) (250.8 mgd), which is greater than the approved withdrawal rate for the Tri-Gen (4.32 mgd). Since all three power facilities are once through cooling facilities, Commission staff finds that the allocation is adequate to protect in-stream uses of the Schuylkill River.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

### C. DECISION

- I. Effective on the approval date for Docket No. D-1995-010 CP-2 below:
  - a. Docket No. D-95-10 is terminated and replaced by Docket No. D-1995-010 CP-2; and
  - b. The project and the appurtenant facilities described in Section A “Physical Features” shall be added to the Comprehensive Plan.
- II. The project and appurtenant facilities as described in the Section A “Physical features” are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:
  - a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP. The docket holder shall register with and report to the PADEP all surface and ground water sources described in this docket in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).
  - b. The facility and operational records shall be available at all times for inspection by the DRBC.
  - c. During any month, GFCF’s withdrawal from Intake Nos. 1 shall not exceed 133.92 million gallons. Furthermore, Intake No. 1 shall not be pumped above the maximum instantaneous rate of 4.32 mgd.
  - d. The three facilities at the Schuylkill Site currently report water use and pay surface water fees to the Commission separately. Even though Exelon is ultimately responsible for payments to be paid to the Commission, staff recommend that the docket holder continue paying for water used at the facility and copy Exelon on any and all communications.
  - e. The docket holder shall implement to the satisfaction of the PADEP, the continuous program to encourage water conservation in all types of use within the facilities served by this approval. The docket holder will report to the PADEP on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.
  - f. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

i. A complete application for the renewal of this docket, or a notice of intent to cease the operations (withdrawal, discharge, etc.) approved by this docket by the expiration date, must be submitted to the DRBC at least 12 months prior to the expiration date below (unless permission has been granted by the DRBC for submission at a later date), using the appropriate DRBC application form. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below, the terms and conditions of this docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

j. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

k. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

l. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission. Exelon has purchased storage in Merrill Creek Reservoir for the SGS, GFCF, and Tri-Gen and may be asked to coordinate releases to make up for consumptively used water in the event of a drought emergency declaration as described in the FINDINGS Section of Docket No. D-1964-074 CP-2. The docket holder is required to inform Exelon of all water withdrawals during such time in order to ensure that Exelon implements its approved DMCP when directed by the Commission.

m. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

**BY THE COMMISSION**

**APPROVAL DATE:**

**EXPIRATION DATE:      May 11, 2021**

DRAFT